

524,456

Rec'd T/PTO 10 FEB 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
18 March 2004 (18.03.2004)

PCT

(10) International Publication Number  
**WO 2004/022639 A1**

(51) International Patent Classification: C08K 5/00, C08J 5/18, C08L 23/02, 29/04, 31/04 // (C08K 5/00, 5:06, 5:06)

(74) Common Representative: CIBA SPECIALTY CHEMICALS HOLDING INC.; Patentabteilung, Klybeckstrasse 141, CH-4057 Basel (CH).

(21) International Application Number:  
PCT/EP2003/009543

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 28 August 2003 (28.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
02405773.9 6 September 2002 (06.09.2002) EP

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): CIBA SPECIALTY CHEMICALS HOLDING INC. [CH/CH]; Klybeckstrasse 141, CH-4057 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): SCHNEIDER, Armin [DE/DE]; Lehenerstrasse 59, 79106 Freiburg (DE). ZEDDA, Alessandro [IT/CH]; Friedensgasse 6, CH-4056 Basel (CH). MINDER, Ernst [CH/CH]; Bernhardsmatweg 1, CH-4450 Sissach (CH).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FILM COMPOSITIONS WITH PERMANENT ANTI-FOG, ANTI-MIST AND ANTI-CLOUD PROPERTIES

(57) Abstract: The instant invention discloses a film composition with anti-fog, anti-mist and anti-cloud properties comprising (a) a polyolefin, a polyvinylalcohol, a polyvinylester or mixtures thereof, (b) an effective amount of at least one linear ethoxylated alcohol; and (c) an effective amount of at least one fluorine-containing surfactant. The films are useful as a greenhouse film for agricultural applications.

WO 2004/022639 A1

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/09543

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C08K5/00 C08J5/18 C08L23/02 C08L29/04 C08L31/04  
//(C08K5/00,5:06,5:06)

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C08J C08K C08L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE CA 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; TASHIRO, TAKESHI ET AL: "Antifogging, antistatic, transparent polyolefin films for agriculture" retrieved from STN Database accession no. 132:3897 XP002230068 abstract	1,4-8
Y	& JP 11 322965 A (MITSUBISHI KAGAKU MKV K. K., JAPAN) 26 November 1999 (1999-11-26) ---	1-8
Y	EP 1 152 027 A (CIBA SC HOLDING AG) 7 November 2001 (2001-11-07) cited in the application claims 1-4 ---	1-8
-/--		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

11 December 2003

Date of mailing of the international search report

29/12/2003

Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Rose, E

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/09543

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE CA 'Online!            CHEMICAL ABSTRACTS SERVICE, COLUMBUS,            OHIO, US;            YAMAMOTO, SANEHIRO: "Agricultural film            with long-lasting antifogging effect and            good dustproof property and toughness"            retrieved from STN            Database accession no. 131:338015            XP002230069            abstract            &amp; JP 11 310648 A (MITSUI CHEMICALS INC.,            JAPAN) 9 November 1999 (1999-11-09)</p>	1,4-8
A	<p>DATABASE CA 'Online!            CHEMICAL ABSTRACTS SERVICE, COLUMBUS,            OHIO, US;            KATO, NOBUKATSU ET AL: "Vinyl chloride            resin film for agriculture"            retrieved from STN            Database accession no. 132:109109            XP002230070            abstract            &amp; JP 2000 026684 A (MITSUI CHEMICALS INC.,            JAPAN) 25 January 2000 (2000-01-25)</p>	1-8
A	<p>DATABASE CA 'Online!            CHEMICAL ABSTRACTS SERVICE, COLUMBUS,            OHIO, US;            SAKATANI, YASUKAZU ET AL: "Transparent            thermoplastic polymer agricultural films            with good thermally insulating property"            retrieved from STN            Database accession no. 131:215485            XP002230071            abstract            &amp; JP 11 255909 A (SUMIKA PLASTIC K. K.,            JAPAN) 21 September 1999 (1999-09-21)</p>	1-8

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/09543

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 11322965	A	26-11-1999	NONE	
EP 1152027	A	07-11-2001	BR 0101691 A CA 2346198 A1 CN 1323852 A EP 1152027 A1 JP 2002012712 A US 2001047046 A1	18-12-2001 04-11-2001 28-11-2001 07-11-2001 15-01-2002 29-11-2001
JP 11310648	A	09-11-1999	NONE	
JP 2000026684	A	25-01-2000	NONE	
JP 11255909	A	21-09-1999	CN 1226573 A , B	25-08-1999